



**Australian Government**  
**Department of Health**

**House of Representatives Standing Committee on Health, Aged Care  
and Sport**

**Inquiry into biotoxin-related illnesses in Australia**

**Australian Government Department of Health Submission to the  
Inquiry**

**August 2018**

## Overview

The Department of Health ('the department') thanks the Committee for the opportunity to make a submission to the inquiry into biotoxin-related illness in Australia. The Department appreciates, and is concerned for, Australian patients who are sharing stories about the debilitating symptoms they associate with exposure to biotoxins.

The Department notes the terms of reference for the Inquiry are likely to cover issues beyond the department's purview (such as management of water-damaged buildings). Further, as biotoxin-related illnesses are not captured within the National Notifiable Diseases Surveillance system, the department does not retain data on their frequency or distribution. As such, the department has confined its submission to the health effects of mould and associated research in Australia.

### *Health Risks from Mould*

Mould generally refers to filamentous types of fungi which produce spores that may create allergic (hypersensitivity) reactions in some people. The World Health Organization, after assessing epidemiological, clinical and toxicological evidence, has concluded that there is an association between exposure to dampness or mould and conditions such as asthma, allergic alveolitis and mould infections in susceptible individuals.<sup>1</sup>

Clinically proven allergy to fungal spores has been well understood and described with objective evidence in clinical immunology for some time, and reactions to mould exposure are more likely to occur in people with severe allergies or chronic lung disease.<sup>2</sup> People with respiratory conditions may also be more sensitive to mould and people with compromised immune systems (e.g. immunosuppressed chemotherapy patients) are more at risk of mould infection.<sup>3</sup> Evidence of a direct link between mould exposure and certain debilitating symptoms is contested and of varying quality<sup>4</sup>

The department understands that some people suffer from a collection of chronic debilitating symptom complexes that have been attributed to exposure to mould. The symptoms often reported include skin sensitivity, chronic sinus inflammation, photophobia, night sweats, light headedness, chronic fatigue, chronic headaches, muscle and joint pains, cognitive impairment, and malaise. At this stage, there is insufficient evidence to support a direct link between these symptoms and mould exposure.

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<sup>1</sup> World Health Organization (2009), *World Health Organization guidelines for indoor air quality: dampness and mould*, pg 90.

<sup>2</sup> Western Australian Department of Health, *Mould and Dampness Factsheet*, available: [http://healthywa.wa.gov.au/Articles/J\\_M/Mould-and-dampness](http://healthywa.wa.gov.au/Articles/J_M/Mould-and-dampness)

<sup>3</sup> New South Wales Health, *Mould Factsheet*, available: <http://www.health.nsw.gov.au/environment/factsheets/Pages/mould.aspx>

<sup>4</sup> The American Academy of Allergy Asthma and Immunology (AAAAI) argues that for these illnesses there is a lack of objective evidence, a defined pathology, and specificity of the fungus-fungal product purported to cause the illness. See further AAAAI (2006), *Position Paper: The Medical Effects of Mold Exposure*.

### ***Management of the risks arising from Mould and Dampness***

In recognition of the impact of mould and dampness on indoor air quality, health authorities in Australia provide advice on the risks of mould and how to manage mould and dampness indoors.

At a national level, the Environmental Health Standing Committee (enHealth), an expert advisory committee within the Australian Health Ministers' Advisory Council framework, provides nationally agreed policy advice to health ministers on environmental health issues based on the best available evidence and expertise. EnHealth, which includes members drawn from the Commonwealth, state and territory health authorities, offers guidance on indoor air quality and the treatment of mould<sup>5</sup>. This advice identifies fungi and mould around the home as a potential cause of health problems and recognises that we do not have a full understanding of why some people are more affected than others. Further enHealth provides advice on how to reduce mould or fungi growth, including by reducing indoor relative humidity, ensuring proper ventilation, properly cleaning internal surfaces of evaporative coolers and avoiding using unflued gas and kerosene heaters as they release water vapour and other combustion products.

States and territories also separately offer factsheets on the health risks of mould<sup>6,7,8,9</sup>. These fact sheets:

- advise patients of the health effects of mould;
- provide information on how to find mould in a building;
- suggest ways to prevent mould from growing in a home, including by maintaining proper ventilation, reducing humidity and controlling moisture/dampness;
- advise on ways to safely remove mould;<sup>7</sup> and
- recommend individuals seek medical assistance if they suffer medical problems following exposure to mould.

In some jurisdictions, where mould can be a contributing factor to illness following natural disasters, additional advice from health authorities is available to ensure continued diligence during these periods<sup>8</sup>.

A list of these fact sheets is attached for the committee's reference (Attachment A).

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<sup>5</sup> enHealth, Master Builders Association and the Housing Industry Association, *Health Homes – A Guide to indoor air quality in the home of buyers, builders and renovators*, available: <http://www.hpw.qld.gov.au/SiteCollectionDocuments/HealthyHomes.pdf>

<sup>6</sup> New South Wales Health, *Mould Factsheet*, available: <http://www.health.nsw.gov.au/environment/factsheets/Pages/mould.aspx>

<sup>7</sup> SA Health, *Household Mould Factsheet*, available: <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/protecting+public+health/living+conditions+and+sanitation/household+mould>

<sup>8</sup> Queensland Government, *Mould Factsheet*, available: <https://www.qld.gov.au/community/disasters-emergencies/mould>.

### ***Diagnosis and treatment of adverse responses to mould***

If a person has an ongoing health complaint that may be due to mould exposure, they should consult their GP.<sup>9</sup> A GP may also refer a patient to a clinical immunologist for consultation on clinically significant hypersensitivity to fungi. Clinical immunologists and allergists have available specific diagnostic approaches including bedside allergen testing as well as referral to pathologists for in vitro laboratory-based testing. If a patient's primary clinical manifestation is respiratory, respiratory physicians may be consulted to either optimise the management of a hypersensitivity illness or to further investigate other potentially more concerning causes of respiratory illness.

The department understands that some people suffer from a collection of chronic debilitating symptom complexes that require investigation, diagnosis and management. The department notes the importance of a multidisciplinary approach to patient care, involving general practitioners as well as specialists such as general physicians, infectious diseases physicians, clinical allergists, clinical immunologists and psychiatrists. A number of potential causes of these debilitating symptoms may be relevant and, as a result, each patient should undergo a thorough clinical assessment that considers the patient's complete history as well as appropriate referral for diagnostic investigations.

The department also recognises the importance of specialist pathologists and medical laboratory scientists, in all pathology disciplines, in the thorough investigation of patients experiencing these debilitating symptom complexes. This is particularly important for those patients with non-specific symptom complexes.

### ***Future Steps and Research***

There is currently limited scientific evidence both nationally and internationally on this issue. At a national level the National Health and Medical Research Council (NHMRC) is the Australian Government's main health and medical research funding body and, to date, there have been no NHMRC research grants for biotoxin-related illnesses. Any future Australian Government investment in Australian research into biotoxin-related illnesses would need to occur within the legislative framework that governs the NHRMC.

NHMRC invests in health and medical research through a variety of funding schemes, as assessed through peer review. Each scheme is designed to address strategic outcomes, including the creation of knowledge, translation of research, development of future capability, partnerships and international collaborations.

NHMRC's schemes are highly competitive. NHMRC research programs are advertised nationally and have publicly available policy documentation which includes specific selection criteria and guides to assessment. Information on NHMRC grant funding awarded is made available on the NHMRC website.

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<sup>9</sup> ACT Health, *What is Mould?* Factsheet, available: <https://www.health.act.gov.au/sites/default/files/Fact%20sheets/Mould%20fact%20sheet%20%28June%202011%29.pdf>

NHMRC does not generally determine the subject of research grant applications. Applications are investigator-initiated and therefore based on the expertise and research interests of those applying for funding. Research teams decide their research area and strategy prior to submitting an application to receive NHMRC funding. It is also important to note that grants are awarded based on competitive peer review with the best science and most significant research proposals funded based on the available funding allocation.

In alignment with the overarching goals of NHMRC's Strategic Plan, the NHRMC can initiate a Targeted Call for Research (TCR) to stimulate or greatly advance research in a particular area of health and medical science that will benefit the health of Australians. TCRs complement NHMRC's existing suite of funding schemes by funding priority research in defined areas of need and when urgent research needs emerge.

A TCR is a one-time solicitation for grant applications to address a specific health issue. A TCR specifies the scope and objectives of the research to be proposed, application requirements and procedures, and the review criteria to be applied in the evaluation of applications submitted in response to the TCR.

The Department also notes that the Australian Research Council (ARC) has previously funded some special research initiatives despite not generally funding medical research. Other funding avenues for researchers include the higher education, business or the private non-profit sector.

**Guidance currently available from State and Territory health agencies:**

**Environmental Health Standing Committee of the Australian Health Protection Principal Committee (enHealth)**

enHealth, Master Builders Association and the Housing Industry Association, *Health Homes – A Guide to indoor air quality in the home of buyers, builders and renovators*  
<http://www.hpw.qld.gov.au/SiteCollectionDocuments/HealthyHomes.pdf>

**Australian Capital Territory**

*ACT Health What is Mould? Factsheet*

<https://www.health.act.gov.au/sites/default/files/Fact%20sheets/Mould%20fact%20sheet%20%28June%202011%29.pdf>

**New South Wales**

*NSW Health Mould Factsheet*

<http://www.health.nsw.gov.au/environment/factsheets/Pages/mould.aspx>

**Northern Territory**

*Mould growth and your health*

<https://nt.gov.au/wellbeing/healthy-living/mould-growth>

**Western Australia**

*WA Department of Health Mould and dampness*

[http://healthywa.wa.gov.au/Articles/J\\_M/Mould-and-dampness](http://healthywa.wa.gov.au/Articles/J_M/Mould-and-dampness)

**South Australia**

*SA Health Household mould:*

<http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/protecting+public+health/living+conditions+and+sanitation/household+mould>

**Victoria**

*Mould and Your Health*

<https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/mould-and-your-health>

**Tasmania**

*Damp, condensation and mould Fact Sheet*

[https://www.dhhs.tas.gov.au/housing/about/tenants/tenancy\\_facts\\_and\\_policies/living\\_conditions/damp,\\_condensation\\_and\\_mould](https://www.dhhs.tas.gov.au/housing/about/tenants/tenancy_facts_and_policies/living_conditions/damp,_condensation_and_mould)